

WHAT IS CLAIMED IS:

1. A model management system including a first server serving as a product data management system and a second server arranged on a terminal side for managing  
5 three-dimensional model data of product data input from individual terminals,

said second server comprising:

bulk data storing means for storing bulk data which is actual data of models input from the terminals;

10 meta-data storing means for storing meta-data which is attribute information of the models;

encrypting means, responsive to an input of information indicative of end of design work from any one of the terminals, for encrypting corresponding bulk data stored  
15 in said bulk data storing means; and

transmitting means for transmitting a decryption key matching the encryption and meta-data corresponding to the encrypted bulk data to said first server, and

said first server comprising:

20 storing means for storing the decryption key and the meta-data transmitted thereto from said second server, in a manner associated with each other;

acquiring means, responsive to a browse request for certain bulk data from any one of the terminals, for  
25 acquiring a storage location of the corresponding bulk data by looking up the meta-data and the corresponding decryption key; and

returning means for sending the storage location and the decryption key acquired by said acquiring means to a terminal which has made the browse request.

5           2. A model management apparatus for managing a model constituted by a plurality of parts, comprising:

storing means for storing the model;

attribute information allotting means for  
allotting attribute information to the individual parts of  
10 the model stored in said storing means;

drawing generating means for generating a drawing based on the model stored in said storing means;

attribute information extracting means for  
extracting, from the model, the attribute information of  
15 parts related with the drawing generated by said drawing generating means; and

attribute information affixing means for affixing the attribute information extracted by said attribute information extracting means to the drawing.

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3. The model management apparatus according to claim 2, further comprising attribute information modifying means, responsive to a modification of attribute information affixed to the drawing, for modifying corresponding  
25 attribute information of the model, and responsive to a modification of certain attribute information of the model, for modifying corresponding attribute information affixed to

the drawing.

4. The model management apparatus according to claim 3, further comprising parts list display means for  
5 displaying a parts list which is a list of the parts constituting the model,

wherein when display content of the parts list has been modified, said attribute information modifying means modifies corresponding attribute information of the model  
10 and the drawing, and when the attribute information of the model or the drawing has been modified, said attribute information modifying means modifies corresponding attribute information of the parts list.

15 5. A computer-readable recording medium recording a program for causing a computer to perform a process of managing a model constituted by a plurality of parts, the program causing the computer to function as

storing means for storing the model,  
20 attribute information allotting means for allotting attribute information to the individual parts of the model stored in the storing means,

drawing generating means for generating a drawing based on the model stored in the storing means,

25 attribute information extracting means for extracting, from the model, the attribute information of parts related with the drawing generated by the drawing

generating means, and

attribute information affixing means for affixing  
the attribute information extracted by the attribute  
information extracting means to the drawing.

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6. A model management apparatus for managing a  
model constituted by a plurality of parts, comprising:

storing means for storing the model;

trial manufacture request input means for

10 accepting an input of a trial manufacture request for the  
model stored in said storing means or for a part  
constituting the model;

defining means, responsive to the trial  
manufacture request for the model or the part from said

15 trial manufacture request input means, for defining a  
version number of the model or the part; and

prohibiting means, responsive to definition of the  
version number of the model or the part by said defining  
means, for prohibiting revision or modification of the model

20 or the part with an earlier version number.

7. A computer-readable recording medium recording  
a program for causing a computer to perform a process of  
managing a model constituted by a plurality of parts, the  
25 program causing the computer to function as

storing means for storing the model,

trial manufacture request input means for

accepting an input of a trial manufacture request for a certain part constituting the model stored in the storing means, and

5 defining means, responsive to the trial manufacture request for the certain part from the trial manufacture request input means, for defining the part as a part with a predetermined version number.

8. A model management apparatus for managing a  
10 model constituted by a plurality of parts, comprising:

storing means for storing the model;

relating means for relating any existing  
alternative part, which is an alternative to a certain part  
of the model stored in said storing means, with a  
15 corresponding part of the model; and

selecting means for selecting one of the  
corresponding part and one or more alternative parts related  
therewith as a regular part.

20 9. A computer-readable recording medium recording a program for causing a computer to perform a process of managing a model constituted by a plurality of parts, the program causing the computer to function as

storing means for storing the model,

25 relating means for relating any existing alternative part, which is an alternative to a certain part of the model stored in the storing means, with a

corresponding part of the model, and

selecting means for selecting one of the corresponding part and one or more alternative parts related therewith as a regular part.

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10. A model management apparatus connected to one or two or more terminals for managing a model input from the terminals, comprising:

storing means for storing the model;

10 modification detecting means for detecting a modification made by any one of the terminals with respect to part of the model stored in said storing means;

related part identifying means, responsive to detection of the modification by said modification detecting  
15 means, for identifying a part related with the modified part;

terminal identifying means for identifying a terminal by means of which the part identified by said related part identifying means is revised or modified; and

20 notifying means for notifying the terminal identified by said terminal identifying means that a related part is modified.

11. A computer-readable recording medium  
25 recording a program for causing a computer connected to one or two or more terminals to perform a process of managing a model input from the terminals, the program causing the

computer to function as

storing means for storing the model,

modification detecting means for detecting a  
modification made by any one of the terminals with respect

5 to part of the model stored in the storing means,

related part identifying means, responsive to  
detection of the modification by the modification detecting  
means, for identifying a part related with the modified part,

terminal identifying means for identifying a  
10 terminal by means of which the part identified by the  
related part identifying means is revised or modified, and

notifying means for notifying the terminal  
identified by the terminal identifying means that a related  
part is modified.

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